CLAIMS

What is claimed is:

1. A luminescent sealant comprising a sealant material and at least one luminescent pigment therein.

2. The luminescent sealant according to claim 1, wherein the sealant material is RTV silicone.

3. The luminescent sealant according to claim 1, wherein the luminescent pigment is a thermoluminescent pigment.

4. The luminescent sealant according to claim 3, wherein the thermoluminescent pigment is chlorophane-based.

5. The luminescent sealant according to claim 3, wherein the thermoluminescent pigment is a color changing pigment whereby the pigment changes color upon exposure to heat.

6. The luminescent sealant according to claim 1, wherein the sealant material is substantially clear.

7. The luminescent sealant according to claim 1, wherein the luminescent pigment is photoluminescent.

8. The luminescent sealant according to claim 7, wherein the photoluminescent pigment is strontium-based.

9. The luminescent sealant according to claim 7, wherein the photoluminescent pigment is silicon aluminate-based.

10. The luminescent sealant according to claim 7, wherein the photoluminescent pigment is strontium-based and silicon aluminate-based.

11. The luminescent sealant according to claim 7, wherein the photoluminescent pigment is UV reactive.

12. The luminescent sealant according to claim 7, wherein the photoluminescent pigment is a color changing pigment whereby the pigment changes color upon a change in incident radiation.

13. A method for producing a luminescent sealant comprising mixing a sealant material with a luminescent pigment.

14. The method of claim 13, wherein the step of mixing the sealant material and the luminescent pigment includes mixing the sealant material with a photoluminescent pigment.

15. The method of claim 13, wherein the step of mixing the sealant material and the luminescent pigment includes mixing the sealant material with a thermoluminescent pigment.

16. A method for obtaining temperature information of a surface, the method comprising;

applying a thermoluminescent sealant to the surface;

observing the applied sealant for changes in coloration due to the application of heat.

17. The method according to claim 16, wherein the step of applying includes applying the thermoluminescent sealant to an appliance having at least one heating area.

18. A method for inspecting an article having sealant applied thereto, comprising:

applying photoluminescent sealant to the article in accordance with a predetermined requirement;

adjusting a level of incident radiation on the article having the sealant applied thereto such that the sealant is illuminated;

observing illumination of the photoluminescent sealant; and

at least one of adding or removing the photoluminescent sealant on the article, in response to the observed illumination, to meet the predetermined requirement.

19. The method according to claim 18, wherein the step of applying includes applying a photoluminescent sealant having an RTV sealant mixed with a photoluminescent pigment.

20. The method according to claim 18, wherein the step of applying includes applying a photoluminescent sealant comprising a sealant material mixed with one of a strontium-based pigment and an aluminate-based pigment.

21. The method according to claim 18, wherein the step of adjusting the level of incident radiation includes decreasing an amount of visable light incident on the article.

22. The method according to claim 18, wherein the step of adjusting the level of incident radiation includes increasing an amount of UV radiation incident on the article.

23. An appliance comprising at least one luminescent sealant applied thereto.

24. The appliance according to claim 23, wherein the luminescent sealant is a photoluminescent sealant.

25. The appliance according to claim 23, wherein the luminescent sealant is a thermoluminescent sealant.

26. The appliance according to claim 25, further comprising at least one heating area, wherein the thermoluminescent sealant is applied in proximity to the heating area, whereby the sealant illuminates with a change in temperature of the heating area.

27. The appliance according to claim 25, further comprising at least one heating area, wherein the thermoluminescent sealant is applied in proximity to the heating area, whereby the sealant changes color with a change in temperature of the heating area.